

-2-

Official

9-23-02
9:23:30

C2
~~amplitude detector includes a frequency filter.~~

Sub
C3D37
5 (Amended) The disc drive of claim 1 wherein the vibration detection transducer is a piezoelectric material.

6. (Amended) The disc drive of claim 1 wherein the vibration detection transducer is an electrostatic transducer.

Sub
E1
7. (Twice Amended) ~~The disc drive of claim 1 and further comprising:~~

~~a process controller coupled to the detector and configured to receive the outputted level detected signal and output a process command to reexecute a write command in drive memory.~~

Sub
D4
8. (Twice Amended) The disc drive of claim 1 and further comprising:

~~a microactuator controller coupled to the vibration detection transducer on the movable head suspension assembly and configured to transmit a signal to the vibration detection transducer to move the head.~~

Sub
D5
9. (Twice Amended) The disc drive of claim 1 wherein the disc drive includes a plurality of discs rotationally coupled to the chassis and a plurality of movable head suspension assemblies having heads coupled thereto to read or write to surfaces of the plurality of discs and including a vibration detection transducer coupled to each of the plurality of movable head suspension assemblies.

10. (Twice Amended) The disc drive of claim 1 wherein the

-3-

vibration detection transducer is configured to operate between a detection mode and an actuation mode, in the detection mode, the transducer detecting head vibration and in the actuation mode the vibration detection transducer receiving a signal to energize the vibration detection transducer to move the head.

CH
11. (Twice Amended) The disc drive of claim 10 including:
a microactuator controller coupled to the vibration detection transducer and configured to operate the vibration detection transducer in the actuation mode.

12. (Twice Amended) A method for operating a disc drive comprising steps of:

- (a) providing a vibration detection transducer supported on a movable head suspension assembly having a head coupled thereto configured to generate a transducer signal indicative of head vibration;
- (b) moving the movable head suspension assembly to position the head for read/write operations; and
- (c) detecting a signal amplitude above a threshold amplitude the transducer signal and outputting a level detected signal indicative of head vibration.

Sub D7
13. (Amended) The method of claim 12 wherein the vibration detection transducer is a piezoelectric transducer.

Sub C6
Sub D7
14. (Twice Amended) The method of claim 12 and further comprising the step of:

- (d) transmitting a signal to the vibration detection transducer on the movable suspension assembly to

-4-

~~move the head.~~

Sub
C7
C6
18. (Amended) The method of claim 12 including a microactuator controller coupled to the vibration detection transducer and configured to transmit a signal to the vibration detection transducer to move the head and comprising the step of:

- (d) selectively operating the disc drive in a detection mode and an actuation mode, in the detection mode the vibration detection transducer detecting head vibration and in the actuation mode, the vibration detection transducer moving the head.

Sub
DEI
C8
19. (Twice Amended) A drive assembly comprising:

- a head suspension assembly; and
a detector that provides a signal indicative of a vibration associated with the head suspension assembly and that is responsive to the vibration being greater than a threshold value.

Please add new claim 20 as follows:

REB
DEI
C9
20. (New) The assembly of claim 19 in which the vibration is caused by head vibration.